REMARKS

Reconsideration of this application is requested. Referring now to the text of the Office Action:

(a) claims 1-18, 21-38 and 41-52 stand rejected under 35 U.S.C. § 103(a), as being unpatentable over the teaching of United States Patent No. 5,535,429 (Bergenlid et al.) in view of United States Patent No. 5,507,006 (Knight); and

(b) claims 19-20, 39-40 and 53-54 are objected to as being dependent on a rejected base claim.

Such rejections are respectfully traversed, based on the discussion below.

35 U.S.C. § 103(a) Rejection

With respect to the Examiner's claim rejections under 35 U.S.C. § 103(a), the Examiner has asserted that: "Bergenlid et al. do not specifically disclosed the communication link is temporary interrupting. Knight disclosed such method of temporary ceased radio channel. (see abstract, col. 2/ln. 20-24, col. 3/ln.56-col. 4/ln 2). ...it would have been obvious to one of ordinary skill in the art to provide such method of temporary interrupting communication link, as disclosed in Knight, to the communication system of Bergenlid et al in order to efficiently allocate channel and alleviated disruption of communication link."

The garbled grammar this paragraph renders the Examiner's argument virtually unintelligible. However, the Examiner appears to be asserting that Knight teaches the temporary interruption of data transmission, and that it would be obvious to combine this teaching with that of Bergenlid et al to yield the features of the present invention defined in claims 1-18, 21-38 and 41-52. For the reasons set forth below, this position cannot be supported by the Knight reference, is believed to based on improper hindsight reasoning, and cannot be sustained as a matter of law.

United States Patent No. 5,535,429 (Bergenlid et al.) is discussed in detail in the Applicant's response filed on May 23, 2003. In summary, Bergenlid et al clearly and unambiguously teach that a poorly performing communications connection is "forcibly

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disconnected". Bergenlid et al do not teach, suggest, or even remotely contemplate the temporary interruption of data transmission through a poorly performing link. Instead, Bergenlid et al clearly and unambiguously teach the "forced disconnection" of the impaired connection "so that the current connection can be released" and "the communications channel can be used by another mobile station". It is self evident that such a forced disconnection necessarily involves the permanent termination of data transmission through the involved communications connection.

The fact that Bergenlid et al do not teach or suggest temporary interruption of data transmission through a poorly performing link is admitted by the Examiner at sub-clause 2 of paragraph 4 of the detailed action. In light of the Examiner's admission in this respect, the Examiner's repetition of his reasons presented in the last eight sub-clauses of paragraph 4 of the detailed action ("As per claims 6, 14, 26,34, 46 and 50..."; "As per claims 7 and 27..."; "As per claims 8, 16, 28, 36 ..."; "As per claims 9,17,29,37,47 and 51..."; "As per claims 10, 18, 30, 38, 48 and 52 ..."; "As per claims 15 and 35..."; "As per claims 11 and 13..."; and "As per claims 12 and 32 ...") is not understood, because the Examiner has admitted the falsity of these reasons.

United States Patent No. 5,507,006 (Knight) is directed to a method of improving the quality of communication, as perceived by a user, by timing the transmission of control signaling to coincide with naturally occurring silent periods in normal speech. Thus:

> "Referring to FIG. 2, in a telephone conversation, speech occurs in bursts, with short periods of silence between them. The general principle of the preferred embodiment [is] to inject signalling between the base and mobile stations into the periods between bursts of speech in a call. In this way, the signalling has a reduced effect on the perceived quality of a call." (col. 3/ln4-10, underlining added)

The fact that normal speech (and for that matter, data communications) "occurs in bursts, with short periods of silence between them" was very well known long before the Knight patent. The invention of Knight is based on the realization that the "periods of silence"

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between bursts of communication can be used for control signaling. The advantage of this approach is that a user does not perceive a reduction in call quality due to the control signaling. Thus Knight teaches that the base station detects naturally occurring silent periods in speech or data communication, and injects control signaling into these periods of silence. Thus:

> "According to a further aspect the invention provides, a method of signalling in a cellular radio system comprising: ... determining that voice or data communication between the base station and the mobile station has temporarily ceased; and initiating required signalling with the mobile station during a determined temporary cessation in the voice or data communication ..." (col. 2/lns 16-24)

Thus it will be self evident that Knight detects silent periods, and then uses the detected silent periods for sending control signaling, in order to avoid disruptions that may be perceived by the user.

It may be noted that, at col 1, lns 20-25, Knight states:

> "In handover, the current base station and the mobile need to exchange signalling information. This control signalling is necessarily concentrated into a shor[t] period of time, and because the voice or data transmission may need to be interrupted, albeit briefly, a user may perceive a deterioration in call quality."

Thus it is acknowledged that the transmission of data traffic may be delayed (interrupted) to permit transmission of necessary control signals. However, Knight teaches that such interruptions are undesirable, and seeks to eliminate them. Thus:

> "The present invention seeks to provide a cellular radio system in which the disruption caused by signalling is alleviated." (col 1, lns 37-39)

In light of the forgoing, it will be clear that the combination of Bergenlid et al. and Knight can only yield a cellular communications system in which, during a normal

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communications session, the base station detects naturally occurring silent periods in communication, and injects control signaling into these periods of silence, as taught by Knight. In the event that the communications link (connection) is found to be faulty, then the connection is "forcibly disconnected" as provided by Bergenlid et al. This functionality is not in any way similar to the presently claimed invention.

In order to make up the deficiency, it is necessary to imagine that the skilled artisan would seize upon the well known fact that control signaling may interfere with data transmission; then extrapolate this fact to recognize that data transmission could be deliberately interrupted for other reasons; take the further step that it might be useful to do this without completely disconnecting the link; and then top it all off by realizing that this provides a viable method of responding to detection of a poorly performing link. Furthermore, the Examiner appears to suggest that the skilled artisan would be naturally drawn to take all of these steps, prompted solely by the teaching of Knight, which clearly and unambiguously states that interruptions are undesirable, and are to be avoided. Such a proposition strains credulity, and cannot be sustained.

Knight explicitly states that interruptions in data transmission are undesirable, and teaches methods and systems for avoiding them. Bergenlid et al detects a poorly performing link, and forcibly disconnects it. Neither Bergenlid et al. nor Knight teach, suggest or remotely contemplate that temporarily interrupting data transmission though a faulty connection is useful and/or desirable. Nor do either of these references teach, suggest or remotely contemplate any advantages that might be obtained thereby. Such teaching can only be found in the applicant's own specification. Thus the Examiner has plainly relied upon information gleaned solely from the applicant's own disclosure, as the basis of his rejection. Such hindsight reconstruction is not permissible in law, and does not provide a valid basis for rejection under 35 U.S.C. § 103(a). See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In light of the foregoing it is submitted that the Examiner's rejection under 35 U.S.C. § 103(a) is based on improper hindsight reconstruction, and must be withdrawn. None of the known prior art, taken alone or in any combination, teaches or suggests the features of the present invention. Thus the present invention as defined in independent claims 1, 21 and 41 is

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clearly distinguishable over the prior art of record, and is patentable. The dependent claims 2-20, 22-40 and 42-54 are believed to define further patentable subject matter.

If any extension of time under 37 C.F.R. § 1,136 is required to obtain entry of this response, such extension is hereby respectfully requested. If there are any fees due under 37 C.F.R. §§ 1.16 or 1.17 which are not enclosed herewith, including any fees required for an extension of time under 37 C.F.R. § 1.136, please charge such fees to our Deposit Account No. 19-5113.

Respectfully submitted,

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